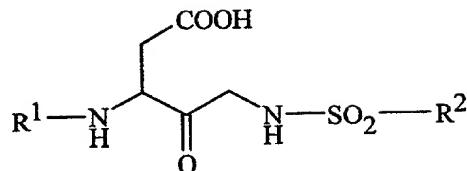
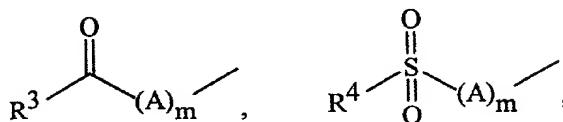


CLAIMS

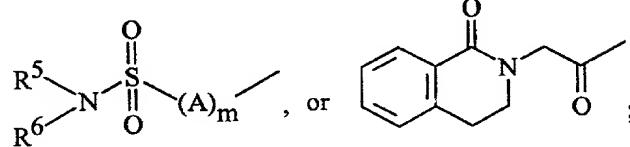
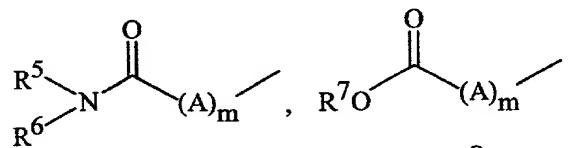
1. A compound of Formula I



I

wherein R¹ is

5

R³ is hydrogen,C₁-C₆ alkyl,-(CH₂)_n aryl, or-(CH₂)_n heteroaryl;

10

R⁴ is C₁-C₆ alkyl,-(CH₂)_n aryl, or-(CH₂)_n heteroaryl;R⁵ and R⁶ are each independently hydrogen,C₁-C₆ alkyl,-(CH₂)_n aryl, or

15

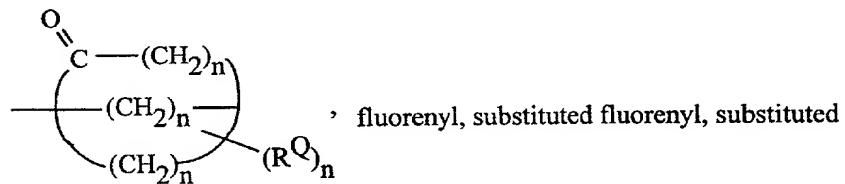
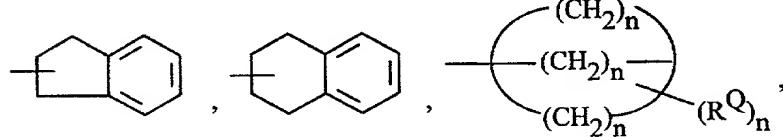
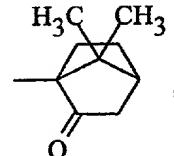
-38-

-(CH₂)_n heteroaryl;R⁷ is C₁-C₆ alkyl,-(CH₂)_n aryl, or-(CH₂)_n heteroaryl;

5 each n is independently 0 to 6;

each m is independently 0, 1, 2, or 3;

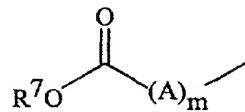
A is alanine, leucine, isoleucine, proline, phenylalanine, glycine, tyrosine, serine, threonine, tryptophan, cysteine, methionine, valine, asparagine, glutamine, aspartic acid, lysine, glutamic acid, arginine, 10 or histidine;

each R^Q is independently hydrogen or C₁-C₆ alkyl;R² is -(CH₂)_n-Z; andZ is aryl, heteroaryl, cycloalkyl, C₁-C₆alkyl,

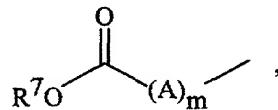
15 fluorenyl, substituted fluorenyl, substituted aryl, substituted heteroaryl, or substituted cycloalkyl, and the pharmaceutically acceptable salts, esters, amides, and prodrugs thereof.

2. A compound according to Claim 1 wherein R¹ is

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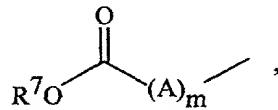


3. A compound according to Claim 1 wherein R^1 is



m is 0, and R^7 is $-(\text{CH}_2)_n$ aryl.

5 4. A compound according to Claim 1 wherein R^1 is



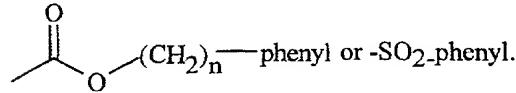
m is 0, and R^7 is $-\text{CH}_2$ aryl.

5. A compound according to Claim 1 wherein R^2 is $-(\text{CH}_2)_n$ aryl.

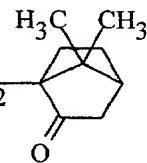
6. A compound according to Claim 5 wherein aryl is phenyl or naphthyl.

10 7. A compound according to Claim 1 wherein R^2 is $-(\text{CH}_2)_n$ -cycloalkyl.

8. A compound according to Claim 1 wherein R^1

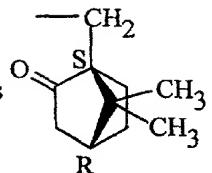


9. A compound according to Claim 1 wherein R^2 is

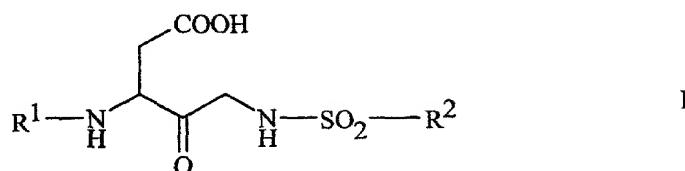


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10. A compound according to Claim 1 wherein R^2 is .



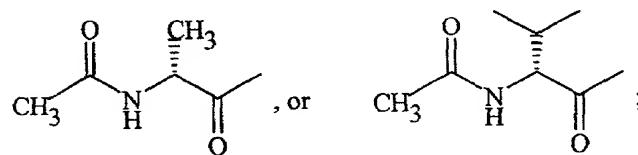
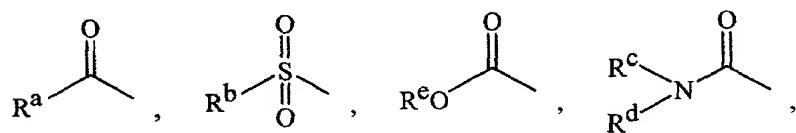
11. A compound of the Formula I



wherein R² is -CH₂CH₂- aryl, -CH₂- cycloalkyl, -CH₂CH₂- cycloalkyl, or -CH₂CH₂- heteroaryl;

5

R^1 is



R^a is -(CH₂)_n- aryl or -(CH₂)_n heteroaryl;

R^b is aryl or heteroaryl;

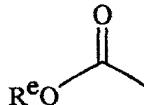
10 R^c is -CH₂ aryl or aryl;

R^d is hydrogen or C₁-C₆ alkyl;

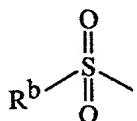
R^e is $-CH_2$ aryl or $-CH_2$ heteroaryl; and the pharmaceutically acceptable salts, esters, amides, and prodrugs thereof.

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12. A compound according to Claim 11 wherein R¹ is



13. A compound according to Claim 11 wherein R¹ is



5 14. A compound according to Claim 11 wherein R^e is -(CH₂)_n aryl.

15. A compound according to Claim 14 wherein aryl is phenyl or naphthyl.

16. A compound according to Claim 13 wherein R^b is aryl.

17. A compound according to Claim 16 wherein aryl is phenyl.

18. The compounds:

10 3-Benzylloxycarbonylamino-4-oxo-5-(2-phenylethanesulfonylamino)-pentanoic acid;

3-Benzylloxycarbonylamino-4-oxo-5-(3-phenyl-propane-1-sulfonylamino)-pentanoic acid;

15 3-Benzylloxycarbonylamino-4-oxo-5-phenylmethanesulfonylamino-pentanoic acid;

5-Benzenesulfonylamino-3-benzylloxycarbonylamino-4-oxo-pentanoic acid;

3-Benzylloxycarbonylamino-5-methanesulfonylamino-4-oxo-pentanoic acid;

20 3-Benzylloxycarbonylamino-5-(naphthalene-1-sulfonylamino)-4-oxo-pentanoic acid;

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3-Benzylloxycarbonylamino-5-(2-cyclohexyl-ethanesulfonylamino)-4-oxo-pentanoic acid;

3-Benzylloxycarbonylamino-5-(2-naphthalen-1-yl-ethanesulfonylamino)-4-oxo-pentanoic acid;

5 3-Benzylloxycarbonylamino-5-(7,7-dimethyl-2-oxo-bicyclo[2.2.1]hept-1-(R)-ylmethanesulfonylamino)-4-oxo-pentanoic acid;

3-Benzylloxycarbonylamino-5-(indan-1-ylmethanesulfonylamino)-4-oxo-pentanoic acid;

10 3-Benzylloxycarbonylamino-5-(9-fluoro-9H-fluoren-9-ylmethanesulfonylamino)-4-oxo-pentanoic acid;

3-Benzylloxycarbonylamino-5-(7,7-dimethyl-2-oxo-bicyclo[2.2.1]hept-1-(S)-ylmethanesulfonylamino)-4-oxo-pentanoic acid;

3-(2-Acetylamino-3-methyl-butyrylamino)-5-(7,7-dimethyl-2-oxo-bicyclo[2.2.1]hept-1-(S)-ylmethanesulfonylamino)-4-oxo-pentanoic acid;

15 3-(2-Acetylamino-propylamino)-5-(7,7-dimethyl-2-oxo-bicyclo[2.2.1]hept-1-(S)-ylmethanesulfonylamino)-4-oxo-pentanoic acid;

3-(1,2,3,4-tetrahydro-1-oxo-isoquinoline-2-yl)-acetanino-5-benzenesulfonylamino-4-oxo-pentanoic acid;

(S)-5-(Bicyclo[2.2.1]hept-1-ylmethanesulfonylamino)-4-oxo-3-[2-(1-oxo-3,4-dihydro-1H-isoquinolin-2-yl)-acetylamino]-pentanoic acid;

20 (S)-4-Oxo-3-[2-(1-oxo-3,4-dihydro-1H-isoquinolin-2-yl)-acetylamino]-5-(2-phenyl-ethanesulfonylamino)-pentanoic acid; and

4-Oxo-3-[2-(1-oxo-3,4-dihydro-1H-isoquinolin-2-yl)-acetylamino]-5-phenylmethanesulfonylamino-pentanoic acid.

25 19. A method of inhibiting interleukin-1 β converting enzyme, the method comprising administering to a patient in need of inhibition of interleukin-1 β converting enzyme a therapeutically effective amount of a compound of Claim 1.

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20. A method of inhibiting Caspase-4, the method comprising administering to a patient in need of Caspase-4 inhibition a Caspase-4 inhibiting amount of a compound of Claim 1.
21. A method of treating or preventing stroke, the method comprising administering to a patient having a stroke or having had a stroke a therapeutically effective amount of a compound of Claim 1.
22. A method of treating inflammatory diseases, the method comprising administering to a patient having an inflammatory disease a therapeutically effective amount of a compound of Claim 1.
- 10 23. The method of Claim 22 wherein the inflammatory disease is arthritis.
24. The method of Claim 22 wherein the inflammatory disease inflammatory bowel disease.
25. A pharmaceutically acceptable composition that contains a compound of Claim 1.
- 15 26. A method of inhibiting interleukin-1 β converting enzyme, the method comprising administering to a patient in need of inhibition of interleukin-1 β converting enzyme a therapeutically effective amount of a compound of Claim 11.
- 20 27. A method of inhibiting Caspase-4, the method comprising administering to a patient in need of Caspase-4 inhibition a Caspase-4 inhibiting amount of a compound of Claim 11.
28. A method of treating or preventing stroke, the method comprising administering to a patient having a stroke or having had a stroke a therapeutically effective amount of a compound of Claim 11.

29. A method of treating inflammatory diseases, the method comprising administering to a patient having an inflammatory disease a therapeutically effective amount of a compound of Claim 11.

30. The method of Claim 29 wherein the inflammatory disease is arthritis.

5 31. The method of Claim 29 wherein the inflammatory disease is inflammatory bowel disease.

32. A pharmaceutically acceptable composition that contains a compound of Claim 11.

10 33. A method of treating septic shock, the method comprising administering to a patient having septic shock a therapeutically effective amount of a compound of Claim 1.

34. A method of treating septic shock, the method comprising administering to a patient having septic shock a therapeutically effective amount of a compound of Claim 11.

15 35. A method of treating reperfusion injury, the method of comprising administering to a patient having reperfusion injury a therapeutically effective amount of a compound of Claim 1.

36. A method of treating reperfusion injury, the method of comprising administering to a patient having reperfusion injury a therapeutically effective amount of a compound of Claim 11.

20 37. A method of treating Alzheimer's disease, the method comprising administering to a patient having Alzheimer's disease a therapeutically effective amount of a compound of Claim 1.

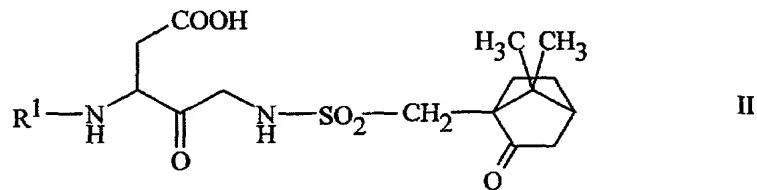
-45-

38. A method of treating Alzheimer's disease, the method comprising administering to a patient having Alzheimer's disease a therapeutically effective amount of a compound of Claim 11.

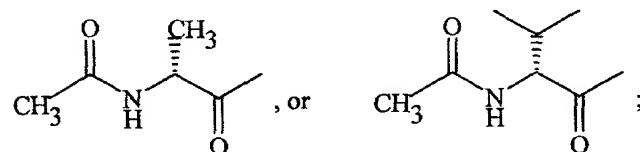
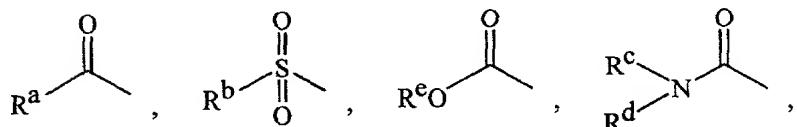
5 39. A method of treating shigellosis, the method comprising administering to a patient having shigellosis a therapeutically effective amount of a compound of Claim 1.

40. A method of treating shigellosis, the method comprising administering to a patient having shigellosis a therapeutically effective amount of a compound of Claim 11.

10 41. A compound of the Formula II



wherein

R¹ is

15 R^a is -(CH₂)_n- aryl or -(CH₂)_n heteroaryl;

R^b is aryl or heteroaryl;

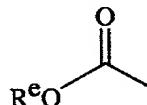
R^c is -CH₂ aryl or aryl;

R^d is hydrogen or C_1 - C_6 alkyl;

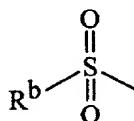
R^e is $-CH_2$ aryl or $-CH_2$ heteroaryl; and the pharmaceutically acceptable salts, esters, amides, and prodrugs thereof.

42. A compound according to Claim 41 wherein R^1 is

5



43. A compound according to Claim 41 wherein R^1 is



44. A compound according to Claim 41 wherein R^e is $-(CH_2)_n$ aryl.

45. A compound according to Claim 41 wherein aryl is phenyl or naphthyl.

10 46. A compound according to Claim 41 wherein R^b is aryl.

47. A compound according to Claim 46 wherein aryl is phenyl.

48. A method of inhibiting interleukin-1 β converting enzyme, the method comprising administering to a patient in need of inhibition of interleukin-1 β converting enzyme a therapeutically effective amount of a compound of Claim 41.

15 49. A method of inhibiting Caspase-4, the method comprising administering to a patient in need of Caspase-4 inhibition a Caspase-4 inhibiting amount of a compound of Claim 41.

50. A method of treating or preventing stroke, the method comprising administering to a patient having a stroke or having had a stroke a therapeutically effective amount of a compound of Claim 41.

5 51. A method of treating inflammatory diseases, the method comprising administering to a patient having an inflammatory disease a therapeutically effective amount of a compound of Claim 41.

52. The method of Claim 51 wherein the inflammatory disease is arthritis.

53. The method of Claim 51 wherein the inflammatory disease inflammatory bowel disease.

10 54. A method of treating septic shock, the method comprising administering to a patient having septic shock a therapeutically effective amount of a compound of Claim 41.

55. A method of treating reperfusion injury, the method of comprising administering to a patient having reperfusion injury a therapeutically effective amount of a compound of Claim 41.

15 56. A method of treating Alzheimer's disease, the method comprising administering to a patient having Alzheimer's disease a therapeutically effective amount of a compound of Claim 41.

57. A method of treating shigellosis, the method comprising administering to a patient having shigellosis a therapeutically effective amount of a compound of Claim 41.

20 58. The compounds:
3-[2-(2-Benzylloxycarbonylamino-3-methyl-butyrylamino)-propionylamino]-4-oxo-5-(2-phenyl-ethanesulfonylamino)-pentanoic acid;

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3-[2-(2-Benzylloxycarbonylamino-4-carboxy-butyrylamino)-3-methyl-butyrylamino]-4-oxo-5-(2-phenyl-ethanesulfonylamino)-pentanoic acid;

5 3-[2-[4-Carboxy-2-(3-phenyl-propionylamino)-butyrylamino]-3-methyl-butyrylamino]-4-oxo-5-(2-phenyl-ethanesulfonylamino)-pentanoic acid;

10 3-[2-(2-Benzylloxycarbonylamino-3-methyl-butyrylamino)-propionylamino]-5-(7,7-dimethyl-2-oxo-bicyclo[2.2.1]hept-1-ylmethanesulfonylamino)-4-oxo-pentanoic acid;

15 3-[2-[4-Carboxy-2-(3-phenyl-propionylamino)-butyrylamino]-3-methyl-butyrylamino]-5-(7,7-dimethyl-2-oxo-bicyclo[2.2.1]hept-1-ylmethanesulfonylamino)-4-oxo-pentanoic acid;

20 3-(2-[2-Acetylamino-3-(4-hydroxy-phenyl)-propionylamino]-4-carboxy-butyrylamino)-3-methyl-butyrylamino)-5-(7,7-dimethyl-2-oxo-bicyclo[2.2.1]hept-1-ylmethanesulfonylamino)-4-oxo-pentanoic acid; and
3-(2-[2-Acetylamino-3-(4-hydroxy-phenyl)-propionylamino]-4-carboxy-butyrylamino)-3-methyl-butyrylamino)-4-oxo-5-(2-phenyl-ethanesulfonylamino)-pentanoic acid.